

§ 665.13

with a minimum service life of ten years or 350,000 miles;

(3) Medium-size, medium duty transit buses (approximately 30' in length) with a minimum service life of seven years or 200,000 miles;

(4) Medium-size, light duty transit buses (approximately 25'-35' in length) with a minimum service life of five years or 150,000 miles; and

(5) Other light duty vehicles such as small buses and regular and specialized vans with a minimum service life of four years or 100,000 miles.

(f) Tests performed in a higher service life category (*i.e.*, longer service life) need not be repeated when the same bus model is used in lesser service life applications.

(g) The operator of the bus testing facility shall develop a test plan for the testing of vehicles at the facility. The test plan shall follow the guidelines set forth in the appendix to this part.

§ 665.13 Test report and manufacturer certification.

(a) Upon completion of testing, the operator of the facility shall provide the resulting test report to the entity that submitted the bus for testing.

(b)(1) A manufacturer or dealer of a new bus model or a bus produced with a major change in component or configuration shall provide a copy of the corresponding full bus testing report and any applicable partial testing report(s) to a recipient during the point in the procurement process specified by the recipient, but in all cases before final acceptance of the first bus by the recipient.

(2) A manufacturer who releases a report under paragraph (b)(1) of this section also shall provide notice to the operator of the facility that the report is available to the public.

(c) If a bus model subject to a bus testing report has a change that is not a major change under this Part, the manufacturer or dealer shall advise the recipient during the procurement process and shall include a description of the change and the manufacturer's basis for concluding that it is not a major change.

(d) A bus testing report shall be available publicly once the bus manufacturer makes it available during a re-

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cipient's procurement process. The operator of the facility shall have copies of all the publicly available reports available for distribution.

(e) The bus testing report is the only information or documentation that shall be made publicly available in connection with any bus model tested at the bus testing facility.

Subpart C—Operations

§ 665.21 Scheduling.

(a) To schedule a bus for testing, a manufacturer shall contact the operator of FTA's bus testing program. Contact information and procedures are available on the operator's bus testing Web site, <http://www.altoonabustest.com>.

(b) Upon contacting the operator, the operator shall provide the manufacturer with the following:

(1) A draft contract for the testing;

(2) A fee schedule; and

(3) The draft test procedures that will be conducted on the vehicle.

(c) The operator shall provide final test procedures to be conducted on the vehicle at the time of contract execution.

(d) The operator shall process vehicles for testing in the order in which the contracts are signed.

§ 665.23 Fees.

(a) The operator shall charge fees in accordance with a schedule approved by FTA, which shall include prorated fees for partial testing.

(b) Fees shall be prorated for a vehicle withdrawn from the bus testing facility before the completion of testing.

§ 665.25 Transportation of vehicle.

A manufacturer shall be responsible for transporting its vehicle to and from the bus testing facility at the beginning and completion of the testing at the manufacturer's own risk and expense.

§ 665.27 Procedures during testing.

(a) The operator shall perform all maintenance and repairs on the test vehicle, consistent with the manufacturer's specifications, unless the operator determines that the nature of the

maintenance or repair is best performed by the manufacturer under the operator's supervision.

(b) The manufacturer shall be permitted to observe all tests. The manufacturer shall not provide maintenance or service unless requested to do so by the operator.

APPENDIX A TO PART 665—TESTS TO BE PERFORMED AT THE BUS TESTING FACILITY

The eight tests to be performed on each vehicle are required by SAFETEA-LU and are based in part on tests described in the FTA report "First Article Transit Bus Test Plan," which is mentioned in the legislative history of section 317 of STURAA. When appropriate, Society of Automotive Engineers (SAE) test procedures and other procedures accepted by the transit industry will be used. The eight tests are described in general terms in the following paragraphs.

1. MAINTAINABILITY

The maintainability test should include bus servicing, preventive maintenance, inspection, and repair. It also should include the removal and reinstallation of the engine and drive train components that would be expected to require replacement during the bus's normal life cycle. Much of the maintainability data should be obtained during the bus durability test at the test track. Up to twenty-five percent of the bus life should be simulated and servicing, preventive maintenance, and repair actions should be recorded and reported. These actions should be performed by test facility staff, although manufacturers should be allowed to maintain a representative on site during the testing. Test facility staff may require a manufacturer to provide vehicle servicing or repair, under the supervision of the facility staff. Because the operator will not become familiar with the detailed design of all new bus models that are tested, tests to determine the time and skill required to remove and reinstall an engine, a transmission, or other major propulsion system components may require advice from the bus manufacturer. All routine and corrective maintenance should be carried out by the test operator in accordance with the manufacturer's specifications.

The maintainability test report should include the frequency, personnel hours, and replacement parts or supplies required for each action during the test. The accessibility of selected components and other observations that could be important to a bus user should be included in the report.

2. RELIABILITY

Reliability should not be a separate test, but should be addressed by recording all bus failures and breakdowns during testing. It is recognized that with one test bus it is not feasible to conduct statistical reliability tests. The detected bus failures, repair time, and the actions required to return the bus to operation should be recorded in the report.

3. SAFETY

The safety test should consist of a handling and stability test. The handling and stability test should be an obstacle avoidance or double-lane change test performed at the test track. Bus speed should be held constant throughout a given test run. Individual test runs should be made at increasing speeds up to a specified maximum or until the bus can no longer be operated safely over the course, whichever speed is lower. Both left- and right-hand lane changes should be tested.

4. PERFORMANCE

The performance test should be performed on the test track and should measure acceleration, maximum speed attained, gradeability, and braking. The bus should be accelerated at full throttle from a full stop to maximum safe speed on the track. The gradeability capabilities should be measured when starting from a full stop on a steep grade, and supplemented by calculating gradeability based on the acceleration data. The functionality and performance of the service, regenerative (if applicable), and parking brake systems should be evaluated at the test track. The test bus should be subjected to a series of brake stops from specified speeds on high, low, and split-friction surfaces. The parking brake should be evaluated with the bus parked facing both up and down a steep grade.

5. STRUCTURAL INTEGRITY

Two complementary structural integrity tests should be performed. Structural strength and distortion tests should be performed at the Bus Testing Center, and the structural durability test should be performed at the test track.

a. Structural Strength and Distortion Tests

(1) A shakedown of the bus structure should be conducted by loading and unloading the bus with a distributed load equal to 2.5 times the load applied for the gross weight portions of testing. The bus should then be unloaded and inspected for any permanent deformation on the floor or coach structure. This test should be repeated a second time, and should be repeated up to one more time if the permanent deflections vary